Solicitation Number: SCC060001-A1

Statewide Research and Survey Services

Category 3.1.4. Program Evaluation

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Submitted to:
Strategic Contracting Centers
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Experience and Expertise—Program Evaluation 3.1.4.

Overview of Experience and Expertise

LeCroy & Milligan Associates, Inc. (LMA) has the breadth of experience and a service philosophy that is well suited to the variety of services requested in the solicitation . For the past 14 years, LeCroy & Milligan Associates has provided research, evaluation, planning and training services for state, federal and local agencies in a variety of project areas.

The combined personnel of our organization provide a unique balance of individuals that have the analytical, statistical, and substantive expertise to respond to the demands of the RFP and produce exceptional consultation and project services. Project teams are formed to include staff members whose unique experience is most needed by a particular project.

Our staff comprise a multi-disciplinary team with professional backgrounds in psychology, social work, public health, juvenile justice, education, public administration, family studies, and management information systems. Our staff's backgrounds include *direct* program development and administrative experience as well as *consultation* in research. This experience enables us to understand the *practical and practice* issues involved in human services. Also, our work is not dependent on one person but rather involves an entire team to provide the service or product. This provides clients with additional assurance that our work will be completed in a timely and efficient manner.

We have a staff of 21 full-time and 2 part-time employees that work efficiently and effectively in designing and carrying out research, planning, and consultation projects. Because we use a team approach in our work, the burden does not fall exclusively on one evaluator to complete work, and thus we can be efficient and timely in our work. Our team includes:
1 President/Evaluator, MSSW
1 Executive Director/Evaluator, PhD
5 Evaluation Associates, Master's Degrees and PhDs
3 Evaluation Specialists, BA
1 Computer Systems Manager, BS
1 Business/Operations Manager
3 Data Entry Specialists
7 Quality Assurance & Training Team Members, 3 Master's Degrees

LeCroy & Milligan Associates maintains a well-established office in Tucson, Arizona. The offices are connected with a local area computer network with state-of-the-art word processing equipment, and use Microsoft products, SPSS, Epi-Info, ArcView GIS mapping software, and Dreamweaver software. We also have access to large mainframe computers when needed. Our computer and personnel capacity and experience allows us to process and enter large data sets if needed. Our office has a conference room available for meeting and training when needed. We have a large library of evaluation, prevention and training materials. We have two fax machines to receive documentation and we are available by phone, fax, or email.

Our staff have access to numerous on-line and library resources for reference needs. We have DSL Internet connections with virus and security protection updated regularly. We maintain three websites and regularly post reports, written materials, training materials, and relevant links. We have developed a web platform for training modules used nationally. We use Dreamweaver software for creating secure web-based access for online data collection.

Experience and expertise in Program Evaluation

Experience and expertise conducting outcome and process evaluations to assess service quality, performance, and impact

LeCroy & Milligan Associates has designed and completed outcome and process evaluations for small and large projects, from evaluations of local community based programs to statewide, multi-site, multi-year evaluations. A selection of projects is highlighted below.

<u>Healthy Families Arizona (Department of Economic Security (DES))</u>—a 12-year project including process and outcome evaluation of home visitation program in 26 sites across Arizona (currently expanding to 48 sites). Over the years, we have completed a qualitative interview study, an implementation study, a focus group study, a cost effectiveness study, several literature reviews and outcome studies, and implemented a statewide quality assurance system**.** We developed and revised screening instruments, risk assessment instruments, satisfaction surveys, outcome instruments, and quality assurance tools. Our quality assurance and training staff direct efforts to prepare for Healthy Families credentialing every four years, requiring each site to examine compliance with comprehensive standards. The quality of these efforts was a contributing factor to Arizona becoming the first *state system* to be credentialed by Prevent Child Abuse America. **Key personnel**: Craig LeCroy, Judy Krysik, Kerry Milligan, Allison Titcomb, Pat Canterbury, Hilary Smith, Cindy Jones. Olga Valenzuela, Kate Whitaker, Pauline Haas-Vaughn.

<u>Abstinence Only Program Evaluation</u>—Over the course of 7 years of program evaluation, we have completed survey data collection in over 170 schools throughout Arizona, administering written surveys to over 100,000 youth and adult participants. The primary outcome survey for adolescents had over 100 items related to risk and protective behaviors related with the strongest emphasis on sexual behaviors and intentions. Surveys were carefully reviewed for language , age and cultural appropriateness. Our strategy that enabled this broad saturation was to train program staff in data collection through on-site training, a comprehensive data collection manual, and monthly follow-up and technical assistance. Paper and pencil survey was the only feasible method due to the variety of settings, times and formats of the prevention programming. We attained an excellent response rate with highly reliable data. We also developed surveys for adult participants, parents, and key stakeholders regarding perceptions of the program. We also conducted site interviews and focus groups with program staff, and developed and managed a telephone survey to assess effectiveness of a statewide media campaign during the years of the project. **Key personnel:** Pat Canterbury, April Hizny, Kerry Milligan, Craig LeCroy, Cindy Jones, Olga Valenzuela, Judy Krysik, subcontractor

Pima County Juvenile Probation evaluation. (2003) A multi-faceted evaluation to examine the overall effectiveness of the probation services offered by the Pima County Juvenile Court that addressed four main components: the impact of case compliance and probationer status on recidivism; a literature review of best practices; a series of surveys assessing the public's perception of court priorities and effectiveness; and an investigation of the usefulness of a single system design approach to *case management* in fostering more supportive relationships between probation officers and offenders. The evaluation included interviews, analysis of extracted JOLTS data, surveys, and case file reviews of 450 juvenile records. **Key personnel**: Craig LeCroy, Olga Valenzuela, John Hepburn, subcontractor

Arizona Family Group Decision Making (FGDM) program evaluation (DES)—a three year study (2001-2003)of process and outcomes of the FGDM program in all DES districts in Arizona, which included site visits, observations of family group conferences, instrument development for process and outcome data, analysis of CHILDS data to assess dependency outcomes, and yearly reports and presentations. **Key personnel**: Allison Titcomb, Cindy Jones, Olga Valenzuela, Kerry Milligan.

Juvenile/and Family Drug Court and Diversion program evaluation (Governor's Office of Substance Abuse Policy)—this three year project (2001-2004) included process and outcome studies of three types of projects funded through the Arizona Parents Commission---the Juvenile Drug Courts, the Family Drug Courts and the Juvenile Diversion programs throughout Arizona. **Key Personnel**: Pat Canterbury

Program Evaluation of the Arizona Community Punishment Program (1999) An extensive implementation evaluation of the Community Punishment Programs in 8 Arizona counties for the Arizona Administrative Office of the Courts that included data collection methods such as interviews and a review of program documents. **Key personnel**: Kerry Milligan, Craig LeCroy.

Experience and expertise designing and conducting program and client surveys, site visits, focus groups, personal interviews, and other data collection techniques.

LeCroy & Milligan Associates has engaged in a variety of program evaluations that require extensive data collection and statistical analysis of data. For example, in the Healthy Families program, LeCroy & Milligan Associates designed the data collection forms, trains the program staff in data collection, and facilitates data collection across 48 different statewide sites. In this project, the Healthy Families Arizona staff is trained to administer the individual level measures such as the Ages and Stage Questionnaire and the Healthy Families Parenting Inventory. The evaluation staff is responsible for monitoring the collection of data across the sites and conducting quality assurance procedures with regard to the data. For control group participants the evaluation staff designed the procedures for data collection (including an incentive system), trained our own staff to collect the data, and developed a tracking system to maintain good data collection efforts over time.

LeCroy & Milligan Associates also has extensive experience working with state agencies and personnel in designing and managing data collection efforts. We have experience with several state data systems; for example, we used data from the Child Abuse Registry and CHILDS for the Healthy Families, Family Builders, and Family Preservation/Family Support evaluations. We used data from the JOLTS system for an empirical evaluation of juveniles for the Supreme Court, in the Juvenile/Family Drug Court program, and in the current Pima County Probation Services evaluation. Other experience includes designing data collection for large scale administration in high schools, middle schools, and detention centers (Youth Plus Program and Abstinence Only Education Program); designing data collection and training parole officers to collect data from juvenile Department of Corrections records, evaluation of risk prediction; designing follow-up data collection procedures to evaluate the impact of residential drug treatment for adolescents (Parc Place); and designing data collection instruments and procedures for an abstinence based pregnancy prevention program.

Selected projects completed by LeCroy & Milligan Associates

In the Protecting You, Protecting Me project, funded through the Governors Office of Substance Abuse Policy/Parents Commission (2004-present), LeCroy & Milligan Associates completed interviews, site visits and focus groups with students and staff involved in this peer-led prevention program, to gather baseline and one-year post program qualitative information. Multiple outcome surveys were also developed and administered.
Key Personnel: April Hizny, Jen Kozik, Kerry Milligan.

Two Pima County needs assessment projects, Access to a Pediatric Home for the Homeless Focus Group Study (2002*)* and the Tucson Planning Council Homeless Youth Survey (2005) included focus groups as the main source of data collection to gather needs information from homeless youth. **Key personnel:** Hilary Smith, Craig LeCroy

OASIS Center for Sexual Assault and Relationship Violence program evaluation (University of Arizona). During this two-year project we developed focus group protocols and key informant interview guides to assess the needs and perceptions of the Center among “consumers” and community collaborators. **Key personnel**: Allison Titcomb,

Altar Valley State Incentive Grant Project: this three-year project evaluated an empirically-based substance abuse prevention program in a rural middle school, and included the development of outcome surveys, a needs assessment survey, a program fidelity checklist, and community task force survey. **Key personnel**: Kerry Milligan, Allison Titcomb.

Nevada Department of Health Services “Real Choices” Needs Assessment. LeCroy & Milligan Associates is currently completing a project for the state of Nevada, a needs assessment of the health care systems serving children with special health care needs (CSHCN) . This project includes an extensive survey and assessment of current and past service delivery models and planning approaches that have implemented in Nevada and other states. In order to complete this task we will examine and contrast existing models, frameworks and literature . Major needs, assets and changes in the delivery of services should be reflected in this assessment, with the information being used by state agency planners for improving the Nevada systems. The multi-method assessment includes a literature review, gathering of secondary source data, surveys of providers and consumers, focus groups with providers and consumers, key informant interviews, and workshops and reports for disseminating results.

Key personnel: Pat Canterbury, Allison Titcomb, April Hizny

Experience and expertise analyzing and interpreting data

With regard to statistical analysis, team members are well versed in advanced statistical analysis of data. For example, we have performed various inferential statistics for different evaluation and research projects including: analysis of variance, ANCOVA, t-tests, multiple-regression analysis, log-linear analysis, survival analysis, discriminant analysis, path analysis, and factor analysis. Several team members have had substantial experience in the statistical analysis of experimental outcome data. These analytic methods have been extensively used in the Abstinence Only Education program evaluation, the Arizona Risk/Needs Assessment Study, the Pima County Juvenile Probation Services evaluation, and the Healthy Families Arizona evaluation. The results of many of these analyses have been published in peer reviewed scientific journals, as well as prepared for audience such as program providers, legislators, and state agency decision-makers.

Experience in mining large computer databases

Our in-house MIS professional and several evaluators have gained valuable experience in mining large databases through our Department of Economic Security and juvenile justice projects. We also are well experienced in creating our own large databases which we must use for matching data with large state databases. For example, the Healthy Families evaluation includes over 20 different databases to manage the participant information, and we use SPSS, EPI Info, Excel and ACCESS, which we then use to match with CHILDS data to calculate child abuse rates. In the Abstinence Only program evaluation, we managed over 100,000 surveys utilizing EPI Info and SPSS—two different database and statistical analysis tools. We used data from our databases to run matches against the Arizona Vital Statistics databases to determine pregnancy rates. We have strong expertise in database manipulation, as we frequently extract data or combine databases for different analytic needs. We have experience with several large data systems including Arizona Vital Statistics, CHILDS (child abuse data) and JOLTS (Juvenile On-Line Tracking System), and US Census data. We understand the structure and limitations of these databases, which enables us to anticipate difficulties in data manipulation and build in safeguards. (e.g., matching on several variables to ensure accuracy) LeCroy & Milligan Associates staff also frequently prepares specialized reports for customers about different aspects of the data such as specific variables, types of missing data, frequencies, or client characteristics. Having a MIS administrator who is familiar with evaluation enhances this approach.

Ability to provide technical assistance, document findings and develop reports

<u>Juvenile and Family Drug Courts and Diversion program evaluations (GDSAP).</u> A unique aspect of this evaluation was the development of an Access database for on-site data collection of participant outcome information. Instruments developed included parent and youth surveys, interview protocols for site visits with court staff, and focus group protocols. **Key personnel**: Pat Canterbury, Allison Titcomb, Cindy Jones.

Arizona Promoting Safe and Stable Families (Family Preservation/Family Support) evaluation (DES) (1998- present).
Over the course of this project, we have conducted quarterly "Program evaluation team" meetings with staff from the 16+ providers participating in the evaluation. These meetings vary in their presentation format and content. They are designed to provide evaluation information (i.e. presentation of results), technical assistance in data collection, and capacity building for evaluation. Examples of these three hour meetings include a facilitated activity on developing a program logic model, presentation and discussion of how to utilize evaluation findings, focusing on how to work with fathers (and hence increase data collection), and presentation and discussion on development of an outcome measure. **Key personnel**: Jen Kozik, Allison Titcomb

Arizona Abstinence Only Program Evaluation. Over the course of the project we developed numerous products to communicate often very complex data to program providers and funding decision-makers, including:

- Executive Summaries (targeted toward state agency decision-makers),
- "Highlights" fact sheets, individualized site data reports with pie charts, tables and illustrations,
- a PowerPoint presentation on outcome findings,
- a data CD entitled "Mining the Data—comprehensive risk and protective data of Arizona teens" which included an overview of the project, a section on "how to use this data" and survey data organized by population (youth, adult, parent survey data),
- quarterly provider meetings where we would present on a specific aspect of the study (e.g. media results, parent surveys, school stakeholder surveys),
- a one-day "Evaluation Institute" for program staff with a workshop on "how to use evaluation findings for program enhancement". During presentations with program staff, our staff enjoy using humor, games, and participatory methods to increase receptivity to evaluation information.

References

1) Client Organization/Contact person
Arizona Department of Health Services
Sara Rumann, Program Manager
(602) 364-1400
Project Description/Project Dates: *Arizona's Abstinence Only Program* evaluation was a program evaluation of abstinence only education involving 18 sites, 172 schools, 600 locations, surveys of 100,000 participants on sexual risk and protective factors, four annual telephone media surveys, and provider and stakeholder surveys.
Project Dates: 1998-2003, 2004 –present.

2) Client Organization/Contact person
Arizona Department of Economic Security
Rachel Whyte, Program Manager, Healthy Families Arizona
(602) 542-1563
Paula T. Wright, Statewide Coordinator, Family Group Decision Making Program
Phone: (602) 364-1761

Project Descriptions
Healthy Families Arizona Evaluation. A statewide evaluation involves 48 sites, with over 8500 total families to date. This project has included process and outcome studies, credentialing work, and quality assurance and training components.
Project Dates: 1991 to present.
*Family Group Decision Making program evaluation***.** Three year study of process and outcomes of the family group conferencing program implemented through DES districts statewide. **Project Dates:** 2001-2003

3) Client Organization/Contact person
Arizona Governor's Division for Substance Abuse Policy
Rudy Navarro or Holly Orozco
(602) 542-6004
Project Description/Project Dates: LMA has been involved with numerous projects for the Governor's Division for Substance Abuse Policy. Program evaluation projects include:

- *Juvenile and Family Drug Courts and Diversion program evaluation.*
- *Evaluability Assessment and Evaluation Project for Substance Abuse Prevention Programs for Children*: This project included an assessment of the funded agencies capacity to participate in an evaluation, and the subsequent evaluation of those programs.
- *Protecting You , Protecting Me program evaluation.* Evaluation of a substance abuse prevention program being implemented with the Hopi Reservation.
- *Family Focused Treatment Programs—Program Evaluation.* Process and outcome evaluation of multi-systemetic and functional family therapy services being implementing in the Arizona Department of Corrections Juvenile detention facilities.

Project Dates*:* 2001-present.

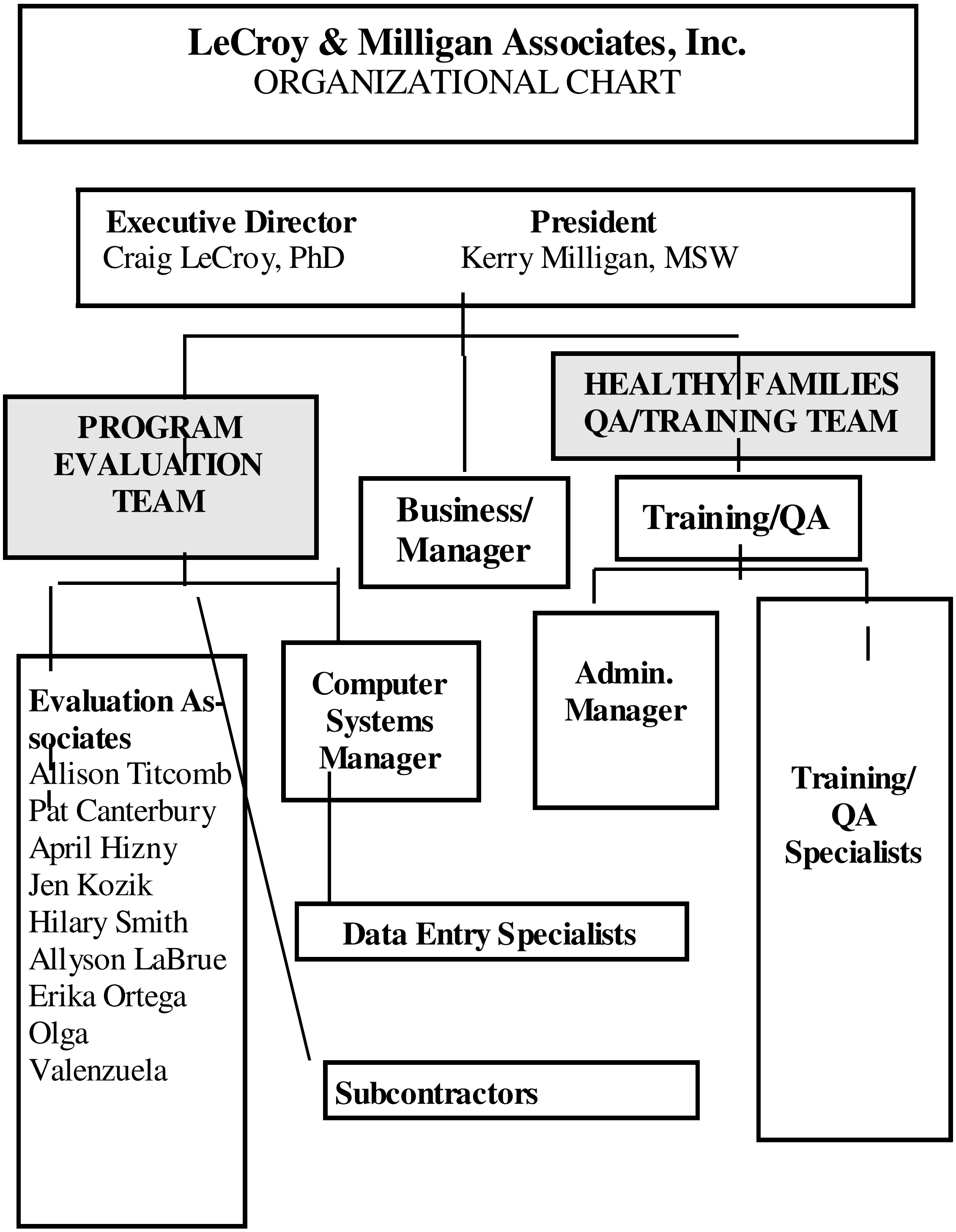
4) Client Organization/Contact person
Pima County Juvenile Probation Department
Karen Godzyk
Phone: (520) 740-2094
Project Description: *Pima County Juvenile Probation evaluation.* A multi-method study which included three large-scale telephone surveys with victims, family members and the general public regarding perceptions of the department's effectiveness, a comprehensive literature review of juvenile treatment approaches, a single system design study with probation officers, and a recidivism study requiring mining of the JOLTS (juvenile on-line tracking system).
Project Dates: June 2002- June 2003

Resumes of key personnel
Resumes of the following key LeCroy & Milligan Associates staff are attached.

Kerry Milligan, MSSW
Craig LeCroy, Ph.D.
Allison Titcomb, Ph.D.
Pat Canterbury, MPH
April Hizny. BA
Hilary Smith, MA
Cindy Jones BA, MIS
Allyson LaBrue. BA
Olga Valenzuela. BA

Potential Subcontractors:

- FMR Associates, Inc. Tucson, Arizona. Founded in 1981, FMR Associates, Inc. specializes in strategic research for the communications industry. We have used them for random-digit dial telephone surveys.
- Judy Krysik, Ph.D.
- Karen Abman, MSW
- John Hepburn, Ph.D.


LeCroy & Milligan Associates, Inc.
ORGANIZATIONAL CHART
Executive Director
Craig LeCroy, PhD
President
Kerry Milligan, MSW
PROGRAM EVALUATION TEAM
HEALTHY FAMILIES QA/TRAINING TEAM
Business/ Manager
Training/QA
Evaluation Associates
Allison Titcomb
Pat Canterbury
April Hizny
Jen Kozik
Hilary Smith
Allyson LaBrue
Erika Ortega
Olga Valenzuela
Computer Systems Manager
Admin. Manager
Training/ QA Specialists
Data Entry Specialists
Subcontractors

Method of Approach—3.1.4. Program Evaluation

LeCroy & Milligan Associates, Inc. is uniquely qualified for designing and conducting outcome and process evaluations due to our past and current work in conducting comprehensive program evaluations. It is our philosophy that in order to conduct a good outcome evaluation, an understanding of the program's process is necessary. There is a broad range of activities and methodologies that can be applied in order to accomplish both process and outcome evaluation. The selection of these activities ultimately depends on the needs and resources of the client. An advantage of our company is that we have a wide range of expertise in both quantitative and qualitative approaches that can be used to conduct process and outcome evaluations. These include qualitative techniques and methods such as document review and content analysis, focus groups, case studies, and in-depth interviews, as well as quantitative and experimental approaches such as quasi-experimental designs, measurement development, surveys, and multi-variate statistical analyses.

Our approach to program evaluation begins with the development of a comprehensive evaluation or research plan which includes the following components.

a) program evaluation design
b) hypotheses
c) samples
d) variables
e) data collection methods and instruments
f) data collection plans
g) data collection quality assurance plans
h) timelines
i) data analysis

A good research/evaluation plan sets the foundation or is the blueprint for the implementation of the evaluation. We develop a solid and feasible research plan by engaging a team of appropriate staff with expertise in the program content and evaluation methodology. We may hire additional experts (on sub-contract) if necessary to advise us on aspects of the plan. An essential part of this process includes involvement and input from the major evaluation stakeholders for determining the scope of the plan that includes all components listed in a-i below.

a) Program evaluation design

The program evaluation design depends on the purpose of the evaluation, that is, whether the evaluation will focus on the program's process and implementation, outcomes, or both.

<u>Program process evaluation</u>. LeCroy & Milligan Associates asks primary questions about a program's process or design that are usually shared by most health and social service programs. The questions listed below typically determine our research objectives and data collection efforts for a process evaluation:

- How is the program described?
- What is the program designed to do? What are its goals and objectives?

- Is there a clear and shared understanding of the program's goals and objectives among staff?
- Are there specific outcomes defined for the program?
- What are the inputs and outputs of the program?
    - Who are the clients?
    - What is the pathway of clients through the program?
    - What is the source and level of funding for the program?
    - How many staff and what is their background and training?
    - Any other sources of support or inputs?
- How are clients recruited?
- What are the barriers to recruitment?
- What are the retention and dropouts rates for the program?
- How much "dosage" of the program is necessary in order for clients to have "received" the program?
- What are the barriers to receiving the program?
- What is the community context of the program?
- How do clients perceive the program?
- How do community stakeholders view the program?

Outcome evaluation. One of our company's strengths is our ability to develop and implement creative program evaluation designs to assess the impact of a program. In using program evaluation designs for results-based accountability we start with the most rigorous design that is feasible. We often use mixed methods to answer the primary outcome evaluation questions, which results in multiple sources of evidence that can be used to determine the program's outcomes. For example, in our impact evaluation of the *Arizona Abstinence Only Program* for the Arizona Department of Health Services (1998-present) , we used a quasi-experimental design (pre-post questionnaires with comparison groups) combined with a series of focus groups with selected program participants, examination of baseline outcome indicators from other studies, and follow-up assessments to determine whether the program had any short-term and long-term impacts on sexual behavior and non-marital birth rates.

Too often, the most rigorous evaluation designs are compromised before they are thoroughly investigated. Still the evaluation design must be practical and realistic. The fundamental principle in carrying out an outcome evaluation design is devising an adequate comparison group. This can be accomplished by using similar subjects who are obtaining "treatment as usual" but not the treatment program, when services reach capacity clients can form a natural comparison group. A "delayed treatment" group can be used whereby clients are randomly assigned to the treatment group or to a wait list control group who receives treatment after serving as control subjects. The process of determining a comparison group requires careful consideration of the program activities, the client needs, and the resources available, which we determine with the input of the program being evaluated.

b) Hypotheses

Ultimately, the design is dependent on the specific *hypotheses or research questions* of the evaluation, and how much interest from policy-makers, legislators, program staff and the public there will be in the evaluation results. First, if there are specific predictions of how a program will achieve its outcomes, this may mean that there is a fairly well developed program theory and model that explains how the program will achieve its outcomes. This can make evaluation of the outcomes easier in some sense. Good program theory can, if necessary, be used in place of a rigorous design, that is, when implementing experimental or quasi-experimental techniques are not feasible. If the program to be evaluated does not have an explicit theory or conceptual model, then our approach is to understand, as much as possible, the implicit concepts and theories the program developers and staff have for the program. This may be done through developing a logic model with the program staff or through less formal means such as meetings and interviews with staff. Through this process of engaging the program stakeholders, *specific hypotheses* can be developed, and who is to be *sampled* for the evaluation and what *variables* are important for measurement can be determined.

Second, the interest of policy and lawmakers and the public can also determine the design, hypotheses, sample and variables of interest in the process and outcome evaluation. If there is high interest or stakes in examining the program's merits and validity, then a rigorous design is recommended. Rigor is usually equated with either achieving or approximating a randomized subjects control group design. However, applying this rigor to the real world is often not feasible or possible, but approximations to it and the use of other strategies discussed above can strengthen the design. For example, in our evaluations *of Healthy Families Arizona*, and the *Arizona Abstinence Only Program*, comparison group and follow-up assessments have been employed. Randomly assigning subjects was not feasible for either program, so the next best possible strategy was used.

Multiple program locations, and large scale program implementations, for example in schools, hospitals or other institutions can demand more complex and creative designs. Our company has experience in the implementation of these types of multiple site, nested designs. For example, multiple locations/sites that are using the same program can be assessed according to their program design fidelity and implementation quality and this process data can then be used in a comparative outcome analysis to see if the differential program fidelity and implementation has implications for outcome.

c) Samples

Sampling of evaluation participants depends on the scope and research questions for the evaluation. LeCroy & Milligan Associates can use sampling techniques for estimating and obtaining adequate representation of the evaluation population that is necessary for detecting significant differences among the outcomes of interest. Our staff have expertise in conducting power analysis for estimating the sample size needed for conducting outcome analysis with various types of outcome evaluation designs.

When determining samples, LeCroy & Milligan also considers the demographics of the target population and prevalence rates for the social problem that the program is trying to address. For example, over-sampling of certain groups may be employed in order to adequately represent a small but crucial group that is targeted for the program, such as high-risk populations, or ethnic groups that are vulnerable to a particular social problem.

d) Variables

LeCroy & Milligan Associates determines the variables of interest in the evaluation through a comprehensive team approach that includes the stakeholders' input and feedback. This is done with direction from what past literature indicates are important variables to measure, through the logic or conceptual model of the program, and through the specific research questions or hypotheses developed by the team. LeCroy & Milligan works to focus the stakeholders' interest on the most important variables of interest, because they will be the focus for measurement. Inevitably, there are limited resources for evaluation. A key to an efficient outcome evaluation is to focus on the most important variables to measure, and to measure them well.

e) Data collection methods and instruments

LeCroy & Milligan determines how to collect the data based on the previous elements of the research plan described above, as well as feasibility and resources. In our process evaluations we typically use multiple data collection strategies. This may include document review (e.g. monthly reports, program proposals, attendance forms), archival research (e.g. institutional records such as recidivism rates, birth rates), interviews, surveys of program staff and participants, program observations, and focus groups. We also determine the most realistic, cost effective, reliable, and useful data collection methods, such as paper instruments, on-line data collection, provision of an on-site database, or face-to-face methods, e.g. interviews and focus groups. Careful consideration needs to be considered to achieve reliable data, for example, is the program able to devote staff time to data entry, does the program have reliable computer and internet resources for web-based data collection, and so on.

Ultimately, the method for gathering data depends on the scope and complexity of the program, and the nature of the target group(s). LeCroy & Milligan has the advantage of drawing from a staff with an expertise in multiple methods. For example, in our evaluation of *the Family Support and Family Preservation Program (Promoting Safe and Stable Families)* for the Department of Economic Security, we have used a data tracking form to collect common process data such as numbers of families served, their demographics, and types of services provided. However, because the Family Support and Preservation program utilizes a complex array of collaborative services, we have used focus groups and case studies to gain a better understanding of how a family engages with this service delivery network and gets their needs met.

We typically use questionnaires, surveys, or analysis of archival data for outcome data collection. Our staff has expertise in either selecting or designing measures that are sensitive to detecting program outcomes. Our process of measurement selection and development includes the following (some of the following steps may be omitted depending on time and resources):

- Identification of the appropriate variables to measure through the team approach described above.
- Review of the literature for reliable and valid measures. We consider such factors as how the measure was developed and how it has been used. That is, has it been used to measure outcomes or it has just been used as a screening instrument? Also we examine whether there has been adequate psychometric data available on the instrument.
- If an appropriate measure does not exist then we create a draft measure by:
    1) soliciting expert advice on items to measure from research and program experts

2) translating the measure into relevant languages for the populations in questions (Spanish or Asian languages most commonly)
3) pilot-testing the draft measure for face validity
4) analyzing the data for internal consistency of item concepts
5) implementing the measure and analyzing it for its ability to measure the variables reliably.

In addition, LeCroy & Milligan has extensive experience in the area of child and family assessments, which lend themselves to special measurement considerations for format and question wording. For example, questions must be worded according to the developmental level of the child, special learning needs, language and cultural considerations. Format is also important so that adults and children can easily read the content and find it pleasing to the eye. All of these things, besides addressing the theoretical content, are taken into account by our staff when developing measures for process and outcome evaluation. For example, in the Arizona Abstinence Program Evaluation, our outcome survey has been extensively revised and tested, and we have four age appropriate versions. We have also translated the survey into Spanish and the translation was reviewed by Spanish speakers in different regions of Arizona.

f) Data collection plans

Our evaluation team creates a data collection plan that outlines all of the major data collection activities according to process and outcome evaluation. These plans typically include what the method or activity for collecting the data is, the variables to be measured or the information that the method is designed to collect, and the source for the data . Whenever possible, existing data sources are used so that duplication of efforts is avoided.

LeCroy & Milligan Associates, Inc. strives to instill a commitment to quality improvement and evaluation among program staff that will continue once our work has been completed. To that end, we are prepared to develop customized surveys and onsite databases for long-term use by program staff. For example, a custom Microsoft Access database was developed for the Crisis Nursery in Phoenix that is currently being used by program staff to track information and generate reports. In addition, customized Access databases were developed for onsite use by program staff for the *Juvenile Drug Court and Diversion programs evaluations*. For both these projects, LeCroy & Milligan Associates, Inc. developed detailed and extensive data management procedures manuals and provided training to program staff on data collection and entry procedures and report generation.

g) Data collection quality assurance plans

LeCroy & Milligan prides itself on its quality assurance for data collection. Obviously, if there is poor quality or missing data the evaluation is jeopardized. It is essential that the data gathered in a program evaluation are valid, meaningful, and they measure what they are intended to measure. LeCroy & Milligan Associates develops quality assurance plans for each evaluation project. We employ various strategies for assuring data quality. These are:

<u>External processes:</u>

- Proper training and technical assistance for data collection staff, whether it be our internal staff, or program provider staff. We conduct orientation and training for data collection, and then provide ongoing monitoring and technical assistance to sustain the effort. For example, in the *Juvenile/Family Drug Court and Diversion program evaluation* for the Governor's Office, program staff are responsible inputting data into an ACCESS database we provided to each site. On this project, we have provided data collection trainings, meetings, and ongoing technical assistance to program staff by assigning evaluation specialists to specific program provider sites. We will often observe data collection at the site to assure proper administration of instruments and attention to issues such as confidentiality.

- Develop training materials, such as user-friendly data collection manuals and other supporting documents.
- Ongoing support and communication with data collection staff using a pro-active approach to avoid misunderstandings or problems.

Internal processes:

- LeCroy & Milligan has a well-trained staff of data entry specialists who have experience with a diverse array of project data and databases.
- We have a standard set of practices to check the data quality, such as random spot checks in the database for data inaccuracies, and periodic checks of the frequency outputs for missing data and outliers.
- We have established comprehensive data security measures, including password protected computer access, locked storage cabinets, staff confidentiality agreements, and often, separation of personal identifying information from survey documents.

LeCroy & Milligan Associates staff also has extensive experience in developing and implementing statewide *systems* for quality assurance and training. In the Healthy Families Arizona model, the statewide system of quality management and quality assurance includes both *program* quality assurance and *data* quality assurance. These components included things such as the development of quality standards which supported program credentialing, development of internal and external quality management processes, extensive site visits for newly developing sites, and continuous feedback of performance data to the sites. This model has served as a prototype for a quality assurance system in several states.

h) Timelines

Timelines for project activities are essential for completing the evaluation efficiently and effectively. They are also good tools for communication with the client. We develop timelines or a "Master Schedule of Evaluation Activities" to keep on track. A variety of software might be used for different timelines such as Fasttrack scheduler. We often submit monthly progress reports to our client, even if they are not required by contract. These progress reports always relate to the master timeline and we indicate to the client if there will be delays for certain activities, and the possible actions that need to be taken to get back on track. Overall, our company has a good record of staying within the projected timelines for a project, and we make every effort to inform the client of our progress.

i) Selecting and implementing appropriate data analysis methods

Part of the research plan includes a data analysis plan that details the steps and methods for analyzing the data. The selection of these methods depends on the following:

- The needs of the client (primary research questions and type of information needed)
- The type of the data collected (e.g. qualitative vs. quantitative)
- The sample size
- Project timeline.

Qualitative Data Analysis. If the data collected is primarily qualitative, e.g. open-ended survey questions, then content analysis may be used to organize the data around the major questions or themes in the narrative, or text under analysis.

We have several staff with experience in qualitative data analysis. The needs of the client drive the type of information that is provided through the qualitative analysis: raw data, description, interpretation, recommendations based on the data, or a combination of all these things.

Quantitative Data Analysis. The quantitative data analysis is driven by the research and hypotheses from the research plan. We have a professional staff that are trained in a variety of descriptive and multi-variate inferential statistical techniques. While our staff has the ability to perform sophisticated analyses, we only use the level that is most appropriate for the project. For example, it may be that more sophisticated methods could be used, but a more sophisticated level may not be needed or required by the client. Other considerations, mentioned earlier, are the type of data available for analysis. Sometimes, the data may be nominal or discrete, and do not lend themselves to sophisticated techniques. For most survey data, the descriptive techniques usually include frequency distributions, percentages, and central tendency statistics are used, for example, to describe the population characteristics, opinions, perceptions, behaviors, attitudes and knowledge.

For data analysis, at a minimum, the following steps are typically conducted by LeCroy & Milligan Staff:

1) Clean the data (check for missing data and accuracies)
2) Determine the data distributions of the major variables for the analysis (i.e. frequency distributions, histograms, central tendencies, skewness, etc.)
3) Based on the results from previous steps, adjust the analytic plan so the analysis is appropriate to the data
4) Create syntax for re-coding of variables if needed, for example to aggregate data, or re-code variables to address uneven distributions, etc.
5) If scales are used, calculated scale scores and determine scale reliability, and conduct item analysis to assess empirical validity
6) Conduct major analyses based on type of data, for example, correlational or inferential statistics.

Prepare reports and make recommendations

LeCroy & Milligan's general approach to documenting findings and report writing is to understand and respond to the information needs of the audience. This will determine the scope and format of the report. We have written reports that vary in their technical nature, and sometimes, we produce several reports or presentations for one project that address different audiences. For example, we may write a comprehensive process and outcome report that is considered the main report, and then we may produce a short report or executive report for policy-makers and the public. In other cases, we have written both a technical report that specifically details the analytic results, and a report for lay audiences that only summarizes and interprets the findings. In several of our multi-site evaluations we have produced individual program site reports for the program providers, designed to highlight program improvement and recommendations for corrective action plans.

Our evaluation reports typically include all of the following components:

- A description of the project being evaluated, including the contractual and performance requirements
- A description of the methodology used in the evaluation
- A description of the limitations and challenges of the study and research design
- How we constructed the sample and demographic characteristics of the sample
- The major questions or hypotheses for the evaluation
- The statistical analysis approach and results , including confidence intervals
- The major findings
- Recommendations for the program improvement and planning.

If appropriate for the audience, we may also describe in detail the statistical analyses used. If a test of mean differences was employed, the means, standard deviations, confidence intervals and effect sizes are usually reported, as is recommended by the American Psychological Association task force on statistical analysis.

LeCroy & Milligan Associates believes an in-person presentation of project results is critical for understanding and utilization of evaluation results. Our preparation of presentations is based on the same considerations described above for reports. We have conducted presentations of evaluation information and results that have included some or all of the components in the list of activities (a-i, above) to a wide variety of audiences: our clients, policy-makers, program providers and participants in the evaluation, advocacy groups, professional evaluators, national conferences, and the general public. Our approach is to tailor the information based on the needs and expertise of the audience, and to use the following fundamental presentation techniques for engaging and maintaining the audience interest:

- An introduction that includes the purpose and outline of the presentation
- Identifying and linking information to the unique concerns of the audience
- Variation of presentation format, for example, lecture, visuals, handouts, and interactive techniques if appropriate
- Professional format and display, PowerPoint, or overheads
- If using graphs and charts, a display of the information in a simple, easy-to-read format

- Facilitating the utilization and application of the information through discussion and follow-up.

Background Information/Samples of Work

Samples of our work in this area may be found at our website www.lecroymilligan.com. Recommended materials for your review include:

- The *2002 Final Evaluation Report and 2004 Annual Evaluation Report for Healthy Families Arizona*,
- The *Executive Summary* of *the Evaluability Assessment and Evaluation Project,* a program review project completed for the Governor's Office of Substance Abuse Policy,
- The *Executive Summary of the Final Report for the Abstinence Only Education program* evaluation completed for the Department of Health Services.
- *The Executive Summary of the Pima County Juvenile Probation Services evaluation*
- *The 2002 Promoting Safe and Stable Families Annual Report.*
- *2001, 2002, 2003 Family Group Decision Making program evaluation annual reports*